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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	10/694,502	BOWLER, STEVEN B.		
Office Action Summary	Examiner	Art Unit		
	MARK A. FLEISCHER	3624		
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	correspondence address		
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	PATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tinwill apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on <u>24 A</u> This action is FINAL . 2b) ☑ This Since this application is in condition for allowated closed in accordance with the practice under A	s action is non-final. ince except for formal matters, pro			
Disposition of Claims				
4) ☐ Claim(s) 1,2,4,5 and 7-22 is/are pending in the 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1,2,4,5 and 7-22 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.			
Application Papers				
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 02 June 2008 is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the E	a) accepted or b) objected to drawing(s) be held in abeyance. Section is required if the drawing(s) is object.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate		

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DETAILED ACTION

Status of Claims

 This non-final Office Action is in reply to the Request for Continued Examinations and amendments filed on 24 April 2009.

- 2. Claims 1, 2, 10, 11, 19 and 22 have been amended.
- Claim 23 has been cancelled.
- 4. Claims 1, 2, 4, 5 and 7–22 are currently pending and have been examined.

Continued Examination Under 37 CFR 1.114

5. A request for continued examination under 37 CFR §1.114, including the fee set forth in 37 CFR §1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR §1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR §1.114. Applicant's submission filed on 24 April 2009 has been entered.

Response to Amendment

- The objection to claim 14 is withdrawn in light of Applicant's clarifying remarks.
- 7. The objection to claim 19 is withdrawn in light of Applicant's amendments.
- 8. The rejection of Claim 14 under 35 U.S.C. §112, 2nd is withdrawn in light of Applicant's arguments.

Response to Arguments

9. Applicant's arguments received on 24 April 2009 have been fully considered but they are not persuasive and, due to the amendments are moot. Referring to the previous Office action, Examiner has cited relevant portions of the references as a means to illustrate the systems as taught by the prior art. As a means of providing further clarification as to what is taught by the

references used in the first Office action, Examiner has expanded the teachings for comprehensibility while maintaining the same grounds of rejection of the claims, except as noted above in the section labeled "Status of Claims." This information is intended to assist in illuminating the teachings of the references while providing evidence that establishes further support for the rejections of the claims.

Applicant has attempted to distinguish the claims from those taught in the prior art by amending the claims to articulate distinct programs using negative limitations, which are generally considered a valid approach to narrowing a claim. Applicant's use of the negative limitations however presents several problems as noted in the 35 U.S.C. §112 rejections below. Notwithstanding those particular issues, the essence of these negative limitations is presented in the prior art of Rosnow as shown below which describes projects and/or programs managed by separate individuals or entities.

In addition, the prior art specifically addresses managing "multiple projects" (Robson [9,25-27]). Applicant argues that the above reference merely refers to actions related to "storing information about multiple projects [and] does not teach or suggest that those projects are linked in any way." (Applicant's Remarks, p. 13). However, Robson states that "In practice, projects may be considerably more complex than suggested by FIG. 2 and the present invention is drawn to managing such complex projects, using the systems and methodologies detailed herein." (emphasis added) (Robson [5,20]) where 'complex projects' reasonably entail a multitude of smaller projects, hence a multitude of tasks.

As noted in the previous Office Action (and incorporated fully herein),

"the crux of Applicant's arguments depends on how one defines a 'program' or 'project' because such definition is essential in determining what constitutes a 'plurality of programs (projects)'. Such definition is, of necessity, dependent on the perspective of a user or other person who must consider the metes and bounds or *scale* of a project. Thus, the 'complex projects' mentioned in Robson may be 'complex' because of its scale and magnitude and the complex linkages between its constituent tasks. If one has the perspective of a high-level

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manager, such person will most likely consider an 'enterprise'-wide project that may reasonably entail many individual 'sub' projects all geared towards advancing the multiplicity of goals of the enterprise. The perspective of a person in a particular department of an enterprise will view a project differently and perhaps in isolation of another project in another department. Indeed, some projects may not have any explicit dependencies on other projects per se, i.e., in terms of project oriented and/or project specific tasks and dependency relationships. Nevertheless, there can exist *implicit* dependencies, and therefore linkages, by virtue of the fact that many projects may require use of common resources thereby creating 'cross-dependencies' between and among tasks associated with a number of different goals. Thus, when viewed from a larger perspective, the enterprise-wide project is just a single, grand project to further the purposes of the enterprise wherein the many 'tasks' have interdependencies and which may come under the purview of one or more departments. Indeed, many approaches for modeling projects using graph theoretic means use sets of nodes to represent tasks or activities. In many cases, sets of such nodes can be collapsed into single nodes which then depict an entire set of tasks or single project or larger-scale task. Similarly, any specific project may involve a multiplicity of smaller, sub-projects. In such case, single nodes in a related graph can be expanded to reveal or model the subtasks comprising a given project. The instant invention therefore seeks to discriminate methods of project management based on its scale which the cited prior art already addresses."

Even if the teachings do not precisely correspond to those of the instant Application, such are obvious in light of the teachings. Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). Furthermore, the Examiner recognizes that references cannot be arbitrarily altered or modified and that there must be some reason why one skilled in the art

would be motivated to make the proposed modifications. Although the motivation or suggestion to make modifications must be articulated, it is respectfully submitted that there is no requirement that the motivation to make modifications must be expressly articulated within the references themselves. References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures, *In re Bozek*, 163 USPQ 545 (CCPA 1969). The issue of obviousness is not determined by what the references expressly state but by what they would reasonably suggest to one of ordinary skill in the art, as supported by decisions in *In re Delisle* 406 Fed 1326, 160 USPQ 806; *In re Kell, Terry and Davies* 208 USPQ 871; and *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988) (citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 (Fed. Cir. 1988)). Further, it was determined in *In re Lamberti* et al 192 USPQ 278 (CCPA) that:

- (i) obvious does not require absolute predictability;
- (ii) non-preferred embodiments of prior art must also be considered; and
- (iii) the question is not express teaching of references but what they would suggest.

According to *In re Jacoby*, 135 USPQ 317 (CCPA 1962), the skilled artisan is presumed to know something more about the art than only what is disclosed in the applied references. Within *In re Bode*, 193 USPQ 12 (CCPA 1977), every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein. In *In re Conrad* 169 USPQ 170 (CCPA), obviousness is not based on express suggestions, but what references taken collectively would suggest.

In the instant case, the Examiner respectfully notes that each and every motivation to combine the applied references is accompanied by select portions of the respective references which specifically support that particular motivation. As such, it is NOT seen that the Examiner's combination of references is unsupported by the applied prior art of record. Rather, it is respectfully submitted that explanation based on the logic and scientific reasoning of one ordinarily skilled in the art at the time of the invention that support a holding of obviousness has

been adequately provided by the motivations and reasons indicated by the Examiner, *Ex pane Levengood* 28 USPQ 2d 1300 (Bd. Pat. App. & Inter., 4/22/93).

Robson clearly contemplates the notion of a plurality of programs: "According to the present invention, the database [] may store the tasks, Issues, Change Requests and Change Orders for a single project or for multiple projects." (emphasis added---Robson [9,25]). Thus, the prior art of record, does teach and at least renders obvious, the notion of displaying and identifying the cross/inter-dependencies between and among tasks of a large and complex project and between and among tasks of several large and complex projects.

With regard to the rejections of claims 7, 8, 15 and 17, Examiner disagrees with Applicant's assertion that "paragraph 6 of the Specification does not remedy the deficiencies of Robson and Pollalis..." (Remarks, p.12). Not only does paragraph 6 explicitly refer to "problem logs", but also refers to alerts and further subject matter as shown below.

Claim Rejections - 35 USC § 112

First Paragraph

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 1, 2, 4 – 5 and 7 – 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1, 2, 10, 11, 19 and 22 contain the phrases "are not considered activities of a larger program" or "are not stored as..." These limitations constitute negative limitations. The MPEP states the following with regard to negative limitations:

"The current view of the courts is that there is nothing inherently ambiguous or uncertain about a negative limitation. So long as the boundaries of the patent protection sought are set forth definitely, albeit negatively, the claim complies with the requirements of 35 U.S.C. 112, second paragraph ... Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), aff 'd mem., 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement."

These claims therefore do not satisfy the requirements under 35 U.S.C. §112, second paragraph, nor do they satisfy the written description requirement under 35 U.S.C. §112, first paragraph as the aforementioned limitations are not described in the disclosure.

Second Paragraph

- 12. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 13. Claims 1, 2, 4 5 and 7 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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• Independent claims 1, 2, 10, 11, 19 and 22 contain the phrases "are not considered activities

of a larger program" or "are not stored as..." These phrases present two aspects which are

problematic. First, the term 'considered' suggests some extra solution activity or some form

of human intervention which entails additional steps as to how and when a decision or

assessment is rendered as when a program is not considered part of a larger program.

Secondly, the term "larger program" incorporates a relative term which renders the claim

indefinite. The term "larger" is not defined by the claim, the specification does not provide a

standard for ascertaining the requisite degree, and one of ordinary skill in the art would not

be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would

have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner

in which the invention was made.

15. Claims 1, 2, 4, 5, 9-14, 16, 18, 19, 20 and 22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Robson (US 7330822 B1) in view of Pollalis (US 5016170 A) and further in

view of Rosnow, et al. (US 7051036 B2).

Claim 1:

Robson, as shown, describes and/or discloses the following limitations:

• storing, by the computer system, a first program comprising a first plurality of activities

and a second program comprising a second plurality of activities [...] (Robson [2.28-30])

• receiving at the computer system, an interdependency between a first activity in the first

plurality of activities and a second activity in the second plurality of activities (Robson, in

at least [5,44] states "Other dependency relationships may be defined and implemented within the context of the present invention [...]") (emphasis added) where 'defining and 'implement[ing]' dependency equates to receiving interdependencies... See also [9,34-49], the step of "storing" and 'defining' a dependency relationship ([9,50]) also corresponds to receiving interdependencies, and in at least [9,27] refers to "multiple projects" which corresponds to from a plurality of programs. Robson [7,52-7] states "Each of the newly defined and integrated Tasks, Issues, Change Requests andor Change Orders may be assigned to a specific person or entity who may be given primary responsibility for the resolution and completion of the newly defined and integrated Task, Issue, Change Request and/or Change Order." (emphasis added) where 'assigned to...' is indicative of specified programs, hence from a plurality of programs. Note also that Robson [1,42] states "Large and complex projects may involve hundreds or thousands of people, and are often widely distributed, not only across geographical and political boundaries, but also across enterprise boundaries and time zones." and thus contemplates the issues of managing many individual program or projects managed by many different individuals. Robson [5,52] goes on to say that "Large projects, by their very nature, may not be fully definable at the project inception. That is, each constituent task of the project may not be defined at the start of the project. Problems can and frequently do arise in complex projects, and these problems, whether on the project critical path or not, may be interrelated to other tasks within the project." This indicates the concept of a project having many interrelated tasks where such tasks could reasonably be denominated as a sub-project with its own constituent set of activities.) and;

graphically displaying, at the computer system the interdependency between the first
activity and the second activity in a computerized schedule available to a program
manage of the first program and a program manager of the second program wherein a
modification of one of the first or second activities causes an effect of the modification to

be graphically displayed in the computerized schedule (Note, Examiner interprets this last limitation as having identical scope as the last limitation in claim 10. See above and Robson [5,52] for the concepts of several projects and activities. Robson, in at least [6,27] states: "This ability [...] not only enables project managers to manage [...]" (emphasis added) where 'enables project...' corresponds to multiple program managers that are 'enabled', hence where the schedule [is] available. Robson also refers to the "project schedule" where it is "viewed as a computer system configured for managing a project...", hence corresponds to a computerized schedule. Robson further states in at least [1,58]: "What are needed, [], are [...] tools that enable project contributors to dynamically update the project definition and timeline." (emphasis added) where this pertains to the 'modification of activities' and the 'update' of the related 'schedule'. In claim 10, the modified schedule corresponds to the *impact of a schedule*. Finally, Robson [5,64] makes the notion of sets of activities explicit and states "One of the major responsibilities of project managers is to accelerate the priority of selected tasks, as it is often only the project manager (or the managers of specific portions of the project) that is privy to the macro-level view of the project necessary to identify potential problem areas and to take the requisite preemptive measures. If unanticipated problems arise and are not integrated within the larger project management framework, critical dates may slip and the timeliness of completion of the project may be in jeopardy." (emphasis added, parenthetical in the original).)

Robson does not specifically disclose *graphically displaying said interdependencies*, but Pollalis, in an analogous art, does as shown. In at least the abstract, Pollalis states: "[I]nformation about dependencies in the performance of the tasks are indicated graphically on the display." Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the features of Robson and Pollalis because Pollalis' system "is interactive, readily understandable, capable of generating meaningful visual images which are useful for the development of schedules and easily updated. It can be employed to develop an initial schedule,

monitor progress, generate forecasting information, and manage a project or group activity." (Pollalis [2,31]) and thus provides a known technique to improve the utility of Robson and those skilled in the art would have recognized that applying the known technique would have yielded an improvement that was predictable.

Neither Robson nor Pollalis specifically teach the following limitation, but Rosnow, in an analogous art does as shown.

storing, by the computer system, a first program comprising a first plurality of activities and a second program comprising a second plurality of activities, wherein the first and second programs are not considered activities of a larger program by the computer system (Rosnow [15,44] states "The project planning system includes a knowledge repository as one or more databases in which project information is accumulated as projects are completed, dropped from consideration, or put on hold or halted during development. Thus, institutional knowledge and experience developed during previous or currently ongoing separate projects to develop new ideas is electronically captured in a comprehensive, organized manner in a searchable computer database within the inventive planning system. This feature permits a system user, and an assigned evaluator, such as a project leader, to investigate and identify any archived or ongoing related projects within the enterprise that might be related to the proposed new idea, and review the results of any identified related projects." (emphasis added) and in Rosnow [27,10] states "By downloading an existing or former project(s) of interest, data and results electronically archived from the earlier can be reviewed and compared to the content of the newly proposed concept. The search results help project leaders prevent duplicity of work performed. Additionally, project leaders may find related projects with which they can share and collaborate with.");

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Robson, Pollalis and Rosnow as all pertain to project management methods and providing information pertinent to separate projects or programs

management by separate entities improves efficiency and reduces the "duplicity of work performed" (Rosnow [27,10] *inter alia*), and such technical methods for combining these teachings existed at the time of the invention and the results of such combination was predictable.

Claim 2:

Robson, as shown, describes and/or discloses the following limitations:

storing in a database (Robson, in at least [3,39] states: "[I]n a project that includes a plurality of interdependent tasks, [...] the database storing: a definition of a first and a second task, a status associated with each of the first and second tasks, and a first dependency relationship between the first and the second task []" (emphasis added) where the 'database' stores the 'interdependent tasks' and the 'dependency relationship') (Robson [3,42-4]) cross-program dependency information between a first program in the plurality of programs and a second program in the plurality of programs, wherein the first program comprises a first plurality of activities and the second program comprises a second plurality of activities, [...] and wherein the cross-program dependency information includes an interdependency between a first activity in the first plurality of activities and a second activity in the second plurality of activities (Robson [5,64] makes the notion of sets of activities explicit and states "One of the major responsibilities of project managers is to accelerate the priority of selected tasks, as it is often only the project manager (or the managers of specific portions of the project) that is privy to the macro-level view of the project necessary to identify potential problem areas and to take the requisite preemptive measures. If unanticipated problems arise and are not integrated within the larger project management framework, critical dates may slip and the timeliness of completion of the project may be in jeopardy." (emphasis added, parenthetical in the original) Robson [7,52-7] states "Each of the newly defined and integrated Tasks, Issues, Change Requests andor Change Orders may be assigned to a specific person or entity who may be given primary responsibility for the resolution and completion of the newly defined and integrated Task, Issue, Change Request and/or Change Order." (emphasis

added) where 'assigned to...' is indicative of specified programs, hence from a plurality of programs. Note also that Robson [1,42] states "Large and complex projects may involve hundreds or thousands of people, and are often widely distributed, not only across geographical and political boundaries, but also across enterprise boundaries and time zones." and thus contemplates the issues of managing many individual program or projects managed by many different individuals. Robson [5,52] goes on to say that "Large projects, by their very nature, may not be fully definable at the project inception. That is, each constituent task of the project may not be defined at the start of the project. Problems can and frequently do arise in complex projects, and these problems, whether on the project critical path or not, may be interrelated to other tasks within the project." This indicates the concept of a project having many interrelated tasks where such tasks could reasonably be denominated as a sub-project with its own constituent set of activities.); and

• graphically displaying, at the computer system, the interdependency between the first activity and the second activity in a program schedule wherein a modification of one of the first or second activities causes an effect of said modification to be graphically displayed in the program schedule (Robson, in at least [6,27] states: "This ability [...] not only enables project managers to manage [...]" (emphasis added) where the text refers to multiple program managers that are 'enabled', hence where the schedule [is] available. Robson also refers to the "project schedule" where it is "viewed as a computer system configured for managing a project...", hence corresponds to a computerized schedule. Robson further states in at least [1,58]: "What are needed, [], are [...] tools that enable project contributors to dynamically update the project definition and timeline." (emphasis added) where this pertains to the 'modification of activities' and the 'update' of the related 'schedule' and corresponds to causes an effect of said modification to said program schedule to be displayed. See the rejection of claim 1 with respect to the notion of activities between and among sets of activities.).

Robson does not specifically disclose *graphically displaying said interdependencies*, but Pollalis, in an analogous art, does as shown. In at least the abstract, Pollalis states: "[I]nformation about dependencies in the performance of the tasks are indicated graphically on the display." Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the features of Robson and Pollalis because Pollalis' system "is interactive, readily understandable, capable of generating meaningful visual images which are useful for the development of schedules and easily updated. It can be employed to develop an initial schedule, monitor progress, generate forecasting information, and manage a project or group activity." (Pollalis [2,31]) and thus provides a known technique to improve the utility of Robson and those skilled in the art would have recognized that applying the known technique would have yielded an improvement that was predictable.

Neither Robson nor Pollalis specifically teach the following limitation, but Rosnow, in an analogous art does as shown.

wherein the first and second programs are not stored as activities of a larger program in the database (Rosnow [15,44] states "The project planning system includes a knowledge repository as one or more databases in which project information is accumulated as projects are completed, dropped from consideration, or put on hold or halted during development. Thus, institutional knowledge and experience developed during previous or currently ongoing separate projects to develop new ideas is electronically captured in a comprehensive, organized manner in a searchable computer database within the inventive planning system. This feature permits a system user, and an assigned evaluator, such as a project leader, to investigate and identify any archived or ongoing related projects within the enterprise that might be related to the proposed new idea, and review the results of any identified related projects." (emphasis added) and in Rosnow [27,10] states "By downloading an existing or former project(s) of interest, data and results electronically archived from the earlier can be reviewed and compared to the content of the newly proposed concept. The search results

help project leaders prevent <u>duplicity of work performed</u>. Additionally, project leaders may find related projects with which they can share and collaborate with.")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Robson, Pollalis and Rosnow as all pertain to project management methods and providing information pertinent to separate projects or programs management by separate entities improves efficiency and reduces the "duplicity of work performed" (Rosnow [27,10] *inter alia*), and such technical methods for combining these teachings existed at the time of the invention and the results of such combination was predictable.

Claim 4:

Robson describes and/or discloses the limitations of claim 1 as shown above. Robson further describes and/or discloses the following limitation.

The method of Claim 1 wherein said modification of one of the first or second activities initiates an approval request requiring a response before said modification (Robson, in at least [0014] states: "[T]o resolve an Issue, the execution of specific steps may be required.

[...T]he steps required to resolve the Issue may be such as to require some level of authorization from some level of the project management team. In such a case, the Issue may evolve into (or may be modified to include) a Change Request [...] When and if authorization is obtained to implement the changes [...], the Change Request [] may evolve into (or be replaced by) a Change Order, [that], identifies the changes or steps that have been authorized by the relevant authority to resolve the Issue[...]." (emphasis added) where modification of [an] activity is correspondent with 'execution of specific steps' along with approval request which is correspondent to a 'change request' and requiring a response before said modification is correspondent with 'if authorization is obtained' and 'authorized by the relevant authority'.)

Claim 5:

Robson describes and/or discloses the limitations of claim 3 as shown above. Robson further describes and/or discloses the following limitation.

The method of Claim 1 wherein said modification causes an electronic message to be sent to the program manager of the first program and the program manager of the second program (Robson, in at least [7,57] states: "The present invention may also advantageously be configured to send a message (such as by email, for example) to the person assigned to any given Task, Issue, Change Request and/or Change Order. The message may be automatically sent via a workflow and Web-based system before the due date of the Task, Issue, Change Request and/or Change Order to remind and/or prompt for changes in the status and estimated completion dates thereof. Automated email-based messaging is highly useful [...]." (emphasis added) where the emphasized text pertaining to 'email' corresponds to an electronic message and 'to the person...' corresponds to managers of programs as they are typically responsible for processing 'change requests'. Robson does not specifically teach that such messages are sent between 'program managers' per se, but Robson, as noted above, does teach sending messages. Note that this message is 'automatically' sent to "the person assigned" which encompasses the task of managing, hence to program managers.)

Claims 9 and 18:

Note that although claims 9 and 18 have different dependencies and, hence different preambles, they have identical scope and so are addressed together. Robson teaches various types of activities such as tasks (Robson [abstract]), deliverables (Robson [6,36]). Robson further teaches that several projects may be managed each involving tasks, etc. (Robson [5,64] and [9,27]). Robson/Pollalis do not specifically describe and/or disclose the activity 'gates' as in the following limitation, but Rosnow, as shown, does.

• the first and second activities are selected from a group consisting of: phases, tasks, deliverables, and gates (Rosnow, in at least [0025] refers to "development phases" and "Project data [...] and tasks [...]" (emphasis added). Rosnow, in at least [0039] states: "Some of the task deliverables [...]" (emphasis added). Finally, Rosnow refers to gates in at least [0010]: "The system [...] prompts decision-makers [...] before

proceeding further with the project at <u>predetermined gates</u> of the development process." (emphasis added).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Robson/Pollalis with those of Rosnow as they permit a variety of different types of activities to be encompassed and handled by project management software and systems and thereby enable greater application of the systems and methods described in the instant application to complex project management problems.

Claim 10:

Robson, as shown, describes and/or discloses the following limitation.

- storing, by the computer system, a first program comprising a first plurality of activities and a
 second program comprising a second plurality of activities [...] (See the rejections of claims 1
 and 2 and 11 wherein receiving at... is functionally equivalent to storing by... Also see
 Robson [2,28-30]),
- receiving, at the computer system, an interdependency between a first activity in the first plurality of activities and a second activity in the second plurality of activities (See the rejections of claims 1 and 2. Also, see Robson [5,64]. Robson, in at least [5,44] states "Other dependency relationships may be defined and implemented within the context of the present invention [...]") (emphasis added) where 'defining and 'implement[ing]' dependency equates to receiving interdependencies... see also the rejection of claim 1, and in at least [9,27] refers to "multiple projects" which corresponds to from a plurality of programs.)
- graphically displaying, at the computer system, the interdependency between the first activity and the second activity in a schedule wherein the graphical display of the schedule includes a status of the first activity in the first program and a status of the second activity in the second program. (See above regarding Robson [5,64]. Robson, in at least [1,58] states: "What is also needed are methods and systems to enable potentially widely disseminated project contributors to update the status of their assigned task [and] accurately describes the current status of the entire project and its constituent tasks [...]." (emphasis added) where

'project contributors' corresponds to *multiple program managers*. Robson, in at least [10,49] further states: "[T]he Web-enabled application embodying the present invention may maintain a selectively and remotely accessible <u>graphical representation</u> [...]" (emphasis added) where 'graphical ...' corresponds to *graphically displaying*... Robson, in at least [1,53]: "As most tasks within a project are connected to many others, a failure or delay in even a seemingly low-level task may have <u>profound repercussions</u> in higher level tasks as <u>the effect</u> of that failure or delay ripples up the project hierarchy." (emphasis added) where the emphasized text corresponds to *impact of a schedule*... as does [1,65]: "describes the current status".)

Robson does not specifically disclose *graphically displaying an impact*, but Pollalis, in an analogous art, does as shown. Pollais [2,37] states: "Large amounts of information can be effectively displayed in a small space. The hierarchical structure allows rapid switching between high level charts and those which depict the greatest level of detail." and corresponds to *graphically displaying an impact...* Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the features of Robson and Pollalis because Pollalis' system "is interactive, readily understandable, capable of generating meaningful visual images which are useful for the development of schedules and easily updated. It can be employed to develop an initial schedule, monitor progress, generate forecasting information, and manage a project or group activity." (Pollalis [2,31]). Pollalis provides a known technique to improve the utility of Robson and those skilled in the art would have recognized that applying the known technique would have yielded an improvement that was predictable.

Neither Robson nor Pollalis specifically teach the following limitation, but Rosnow, in an analogous art does as shown.

• wherein the first and second programs are not considered activities of a larger program by the computer system (Rosnow [15,44] states "The project planning system includes a knowledge repository as one or more databases in which project information is accumulated as projects are completed, dropped from consideration, or put on hold or halted during development. Thus, institutional knowledge and experience developed

during previous or currently <u>ongoing separate projects</u> to develop new ideas is electronically captured in a comprehensive, organized manner in a <u>searchable computer database</u> within the inventive planning system. This feature permits a system user, and an assigned evaluator, such as <u>a project leader</u>, to investigate and identify any archived or ongoing related projects within the enterprise that might be related to the proposed new idea, and review the results of any identified related projects." (emphasis added) and in Rosnow [27,10] states "By downloading an existing or former project(s) of interest, data and results electronically archived from the earlier can be reviewed and compared to the content of the newly proposed concept. The search results help project leaders prevent <u>duplicity of work performed</u>. Additionally, project leaders may find related projects with which they can share and collaborate with."):

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Robson, Pollalis and Rosnow as all pertain to project management methods and providing information pertinent to separate projects or programs management by separate entities improves efficiency and reduces the "duplicity of work performed" (Rosnow [27,10] *inter alia*), and such technical methods for combining these teachings existed at the time of the invention and the results of such combination was predictable.

Claims 11, 19 and 22:

Robson, as shown, describes and/or discloses the following limitation.

• a database operable to maintain cross-program dependency information (Robson in at least [2,30-48]) between a first program in the plurality of programs and a second program in the plurality of programs, wherein the first program comprises a first plurality of activities and the second program comprises a second plurality of activities, [...] and wherein the cross-program dependency information includes an interdependency between a first activity in the first plurality of activities and a second activity in the second plurality of activities (see the rejections of claims 1 and 2); and

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 a processor programmed to: receive the cross-dependency information between the first program and the second program (see the rejections of claims 1 and 2); and

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- graphically display the interdependency between the first activity and the second activity in an electronic schedule, viewable and modifiable by a program manager of the first program and a program manager of the second program across a network, wherein modification of one of the first or second activities reestablishes said interdependency in an updated, graphical display of said electronic schedule (see the rejections of claims 1 and 2 and Robson [5,52]. With respect to the phrase viewable and modifiable by a program manager of the first program and a program manager of the second program across a network, Robson, in at least [2,26] states: "[A] method of managing a project [...] may include steps of defining [...] and storing [...] tasks in a database [...] and remotely accessible over a computer network [...]" and in [0014] states: "[T]he steps required to resolve the Issue [...] may evolve into (or may be modified to include) [...]" (emphasis added) where 'managing a project' and 'defining' corresponds to modifiable by multiple program manager[] and 'computer network' corresponds to across a network. applies to a plurality of managers as shown by Robson in at least [0013]: "This ability to insert an Issue into the task hierarchy not only enables project managers to manage [...]" (emphasis added). Finally, there are repeated instances of persons assigned to resolve an issues, such as a manager as in [7,4] and reference to "multiple projects" as in [9,27].
- a database operative to store (Robson, in at least [0010] states: "[A] method of managing a project [...] may include steps of defining [...] and storing [...] tasks in a database [...]" (emphasis added) where 'defining' corresponds to maintain identifying activities and 'database' corresponds, obviously, to a database.) cross-program dependency information between a first program in the plurality of programs and a second program in the plurality of programs, wherein the first program comprises a first plurality of activities and the second program comprises a second plurality of activities, [...] and wherein the cross-program dependency information includes an interdependency between a first activity in the first

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plurality of activities and a second activity in the second plurality of activities (see the rejections of claims 1 and 2);

- a user interface operative for graphically displaying (Robson, in at least [0025] states: "the user accessing the database", hence is a user interface operative for. Robson further states in [0011]: "The selectively and remotely accessible graphical representation may be rendered on a Web browser or other suitable interface." (emphasis added) and the 'graphical representation' on a 'Web browser' in conjunction with 'suitable interface' corresponds to the aforementioned user interface for graphically...) the interdependency between the first activity and the second activity over a network in an electronic schedule, viewable and modifiable a program manager of the first program and a program manager of the second program wherein modification of one of the first or second activities reestablishes said interdependency in an updated, graphical display of said electronic schedule (Robson [1,34] teaches "Moreover, as the complexity of the project rises, the burden of updating the project schedule may become a significant drain on resources, further eroding its perceived usefulness in the eyes of those tasked with managing the project." and in Robson [fig. 3] teaches a user interface in which viewing and editing constituent tasks are facilitated. As noted in the rejections of claims 1 and 2, Robson contemplates sets of tasks wherein each set is associated as a group as in Robson [5,64] which makes the notion of sets of activities explicit and states "One of the major responsibilities of project managers is to accelerate the priority of selected tasks, as it is often only the project manager (or the managers of specific portions of the project) that is privy to the macro-level view of the project necessary to identify potential problem areas and to take the requisite preemptive measures. If unanticipated problems arise and are not integrated within the larger project management framework, critical dates may slip and the timeliness of completion of the project may be in jeopardy." (emphasis added, parenthetical in the original).).
- a processor programmed (Robson [3,60]) to:

• ...the computer-readable medium having stored thereon a series of computer-executable instructions which, when executed by a processing component of a computer system, causes the processing component to manage programs with cross-program dependencies, by (Robson [4,16]: "The present invention, according to another embodiment thereof, is a machine-readable medium having data stored thereon representing sequences of instructions which, when executed by computing device, causes the computing device to manage a project timeline that includes a plurality of interdependent tasks by performing the steps of ..." (emphasis added) where 'interdependent tasks' corresponds to cross-program dependencies),

• receiv[ing] the cross-dependency information between the first program and the second program (Robson, in at least [5,44] states "Other dependency relationships may be defined and implemented within the context of the present invention [...]") (emphasis added) where 'defining and 'implement[ing]' dependency equates to receiving interdependencies... see also the rejection of claim 1, and in at least [9,27] refers to "multiple projects" which corresponds to from a plurality of programs.)

Robson does not specifically disclose *graphically displaying said interdependencies*, but Pollalis, in an analogous art, does as shown. In at least the abstract, Pollalis states: "[I]nformation about dependencies in the performance of the tasks are indicated graphically on the display." Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the features of Robson and Pollalis because Pollalis' system "is interactive, readily understandable, capable of generating meaningful visual images which are useful for the development of schedules and easily updated. It can be employed to develop an initial schedule, monitor progress, generate forecasting information, and manage a project or group activity." (Pollalis [2,31]) and thus provides a known technique to improve the utility of Robson and those skilled in the art would have recognized that applying the known technique would have yielded an improvement that was predictable.

Neither Robson nor Pollalis specifically teach the following limitation, but Rosnow, in an analogous art does as shown.

wherein the first and second programs are not stored as activities of a larger program in the database (Rosnow [15,44] states "The project planning system includes a knowledge repository as one or more databases in which project information is accumulated as projects are completed, dropped from consideration, or put on hold or halted during development. Thus, institutional knowledge and experience developed during previous or currently ongoing separate projects to develop new ideas is electronically captured in a comprehensive, organized manner in a searchable computer database within the inventive planning system. This feature permits a system user, and an assigned evaluator, such as a project leader, to investigate and identify any archived or ongoing related projects within the enterprise that might be related to the proposed new idea, and review the results of any identified related projects." (emphasis added) and in Rosnow [27,10] states "By downloading an existing or former project(s) of interest, data and results electronically archived from the earlier can be reviewed and compared to the content of the newly proposed concept. The search results help project leaders prevent duplicity of work performed. Additionally, project leaders may find related projects with which they can share and collaborate with.")

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Robson, Pollalis and Rosnow as all pertain to project management methods and providing information pertinent to separate projects or programs management by separate entities improves efficiency and reduces the "duplicity of work performed" (Rosnow [27,10] *inter alia*), and such technical methods for combining these teachings existed at the time of the invention and the results of such combination was predictable.

Claim 12:

Robson/Pollalis describes and/or discloses the limitations of claim 11 as shown above. Robson further describes and/or discloses the following limitation.

The system of Claim 11 wherein the modification of one of the first or second activities initiates an approval request, said approval request requiring a response before said electronic schedule is updated with reestablished interdependencies (Robson, in at least the abstract states: "[T]he Change Request identifies step(s) to be taken pending authorization to resolve the Issue and the Change Order identifies authorized step(s) to do so." (emphasis added) where 'change request' and 'change order' corresponds to modification of an activity and 'authorized steps', ipso facto requires some approval response. In [0007], Robson states: "What are needed, therefore, are improved project scheduling tools that enable project contributors to dynamically update the project definition and timeline." (emphasis added) where 'contributors' corresponds to entities initiating an approval request and 'dynamically update' and 'project definition and timeline' correspond to reestablished interdependencies as new project definitions entail new project dependencies.)

Claim 13:

Robson/Pollalis describes and/or discloses the limitations of claim 11 as shown above. Robson further describes and/or discloses the following limitation.

The system of Claim 11 wherein the modification of one of the first or second activities causes an electronic message to be sent the program manager of the first program and the program manager of the second program (Robson, in at least [0016] states: "Automated email-based messaging is highly useful when the resolution of one or more Tasks, Issues, Change requests and/or Change Orders depends upon actions of people or organizations that are widely scattered across multiple organizations, countries and/or time zones." (emphasis added) where 'automated email..." corresponds to an electronic message and 'resolutions' that 'depends upon actions of people' together corresponds to managers of programs affected by said attempted modification because the resolution is ipso facto made by those affected by change requests or orders. See also the rejection of claim 5 above.)

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Claim 14:

Robson describes and/or discloses the limitations of claim 11 as shown above. Robson further

describes and/or discloses the following limitation.

• wherein the electronic schedule has a fixed duration, and wherein if the modification to

one of the first or second activities causes the fixed duration to change, an electronic

notification is sent to the program managers of the first and second programs (Robson,

in at least [1,58] to [2,20] states: "What are needed, therefore, are [...] tools that enable

project contributors to dynamically update the project definition and timeline [...] to

update the status of their assigned task [...] in a manner that insures that the overall

project timeline accurately describes the current status of the entire project [...]."

(emphasis added) and in at least [7,58] states: "The present invention may also

advantageously be configured to send a message (such as by email, for example) to the

person assigned to any given Task, Issue, Change Request and/or Change Order."

(emphasis added) where the 'project timeline' accounts for tasks with fixed duration or

'anticipated' duration (timeline---see Robson at [1,17] regarding "anticipated timeline")

and is 'dynamically update[d]' via a 'message' sent by 'email' which corresponds to

electronic notification. See also the rejection of claim 5.)

Claim 16:

Robson/Pollalis describes and/or discloses the limitations of claim 11 as shown above. Robson

further describes and/or discloses the following limitation.

• said system is a web-based Program Management Application (Robson, in at least

[0024] states: "As shown [...] the Web-enabled application embodying the present

invention [...]" (emphasis added).)

Claim 20:

Robson/Pollalis describes and/or discloses the limitations of claim 19 as shown above. Robson

further describes and/or discloses the following limitation.

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• said network is The Internet (Robson, in at least [0011] states: "The computer

network may include the Internet [...]" (emphasis added).)

2. Claims 7, 8, 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Robson/Pollalis as applied to claims 3 and 11 above, and further in view of Applicant's own prior

art.

Claims 7 and 17:

Note that although claims 7 and 17 have different dependencies and, hence different preambles

(where, for example, in claim 7 there is an electronic schedule and in claim 17 there is a system),

they have identical scope and so are addressed together. Robson describes and/or discloses the

following limitations as shown above.

• The method of Claim 1 [11] wherein said computerized schedule is operable by

program managers to raise issues, alert [other] program managers of scheduling

changes, arrange team meetings, and initiate phase exit reviews (Robson, in at least

the abstract states: "An Issue, a Change Request and/or a Change Order may be

remotely defined." (emphasis added) where 'issue' that is 'remotely defined'

corresponds to raise issues, 'change request' and 'change order' correspond to

scheduling changes. Robson, in at least [0016] states: "The present invention may

[...] be configured to send a message (such as by email, for example) to the person

assigned to any given Task, Issue, Change Request and/or Change Order."

(emphasis added) where 'send a message' via 'email' corresponds to electronic

schedule [that] is operable and 'the person assigned' to effect a 'change request'

corresponds to a *manager* that is *alert[ed]* via email.)

Robson does not specifically refer to arrange team meetings, and initiate phase exit reviews, but

Applicant, as shown, does. Applicant in at least [0006] of the description of prior art states:

"Program management resources include metrics, problem logs, alerts, team meetings, phase

exit reviews, and audits." (emphasis added). As further shown by the teachings of Robson and

Pollalis, a great deal of development in project management software systems has occurred over the course of many years (from at least the time of Pollalis' invention). As web-enabled commerce evolved and more complex projects undertaken, a *natural scaling up* of project management software and systems that permit management across traditional boundaries is evident as shown in Robson [1,42]: "Large and complex projects may involve hundreds or thousands of people, and are often widely distributed, not only across geographical and political boundaries, but also across enterprise boundaries and time zones."

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Robson/Pollalis with Applicant's prior art thereby providing the capability of establishing tasks and activities, graphically displaying task interdependencies, storing such data in a database, and giving managers the capability to view and track project developments and otherwise usefully manage complex projects as these combined inventions enable users with greater information and control over an increasingly complex project management process involving a multitude of projects.

Claims 8 and 15:

Note that although claims 8 and 15 have different dependencies and, hence different preambles, they have identical scope and so are addressed together. Robson/Pollalis/Rosnow do not specifically describe and/or disclose the following limitation, but Applicant's own prior art, as shown, does.

displaying problem logs associated with the computerized [electronic] schedule
 (Applicant in at least [0006] of the description of prior art states: "Program management resources include metrics, problem logs, alerts, team meetings, phase exit reviews, and audits." (emphasis added). Paragraphs [0007-9] also refer to scheduling methods and techniques.)

As shown by the teachings of Robson and Pollalis, a great deal of development in project management software systems has occurred over the course of many years (from at least the time of Pollalis' invention). As web-enabled commerce evolved and more complex projects

undertaken, a *natural scaling up* of project management software and systems that permit management across traditional boundaries is evident. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Robson/Pollalis with Applicant's prior art thereby providing the capability of establishing tasks and activities, graphically displaying task interdependencies, storing such data in a database, and giving managers the capability to view and track project developments and otherwise usefully manage complex projects as these combined inventions enable users with greater information and control over an increasingly complex project management process involving a multitude of projects

3. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robson/Pollalis/Rosnow as applied to claim 19 above, and further in view of Abrams (US 7305392 B1).

Claim 21:

Robson/Pollalis describes and/or discloses the limitations of claim 19 as shown above. Robson/Pollalis do not specifically describe and/or disclose the following limitations, but Abrams, as shown, does.

said user interface is a JAVA application (Abrams, in at least [0073] states: "The [...] applications [] may be implemented using conventional hypertext markup languages (HTML), Java, and/or other web related software[s]." (emphasis added) where the noted 'markup languages' are used in a user interface and it implementation may be in a JAVA application correspondent to web related software.)

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to combine the teachings of Robson/Pollalis with that of Abrams because, as is widely known, use of Java is platform independent, hence "ports well from one operating system to another" (see Application, [0034]) and thus provides for greater market penetration and wider adoption of the system and methods described.

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Conclusion

Any inquiry of a general nature or relating to the status of this application or concerning this

communication or earlier communications from the Examiner should be directed to Mark A. Fleischer

whose telephone number is **571.270.3925**. The Examiner can normally be reached on Monday-Friday,

9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's

supervisor, Bradley Bayat whose telephone number is 571.272.6704 may be contacted.

Information regarding the status of an application may be obtained from the Patent Application

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/Bradley B Bayat/ Supervisory Patent Examiner, Art Unit 3624